

## ABSTRACT

### Terminal-Phosphate-Labeled Nucleotides with New Linkers

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The present invention describes methods of using terminal-phosphate-labeled nucleotides in the presence of a manganese salt to enhance their substrate properties towards various enzymes. Particularly described are methods of detecting a nucleic acid in a sample, based on the use of terminal-phosphate-labeled nucleotides as  
10 substrates for nucleic acid polymerases, in the presence of a manganese salt. Further provided are manganese complexes of terminal-phosphate-labeled nucleotides as well as terminal-phosphate-labeled nucleotides with new linkers with enhanced substrate properties.